Recombinant RT14 protein (His tag)

Catalog Number	544151
Synonyms	28S ribosomal protein S14, mitochondrial; MRP-S14; S14mt
Species	Human
Expression System	E. coli
Accession	O60783
Molecular Weight	Predictes a molecular mass of 16.79 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 17 kDa band.

Product Information

Sequence Region	1-128
Form	Lyophilized powder
Formulation	Lyophilized from sterile PBS, pH 7.4
Purity	>90%, by SDS-PAGE with Coomassie Brilliant Blue staining.
Endotoxin	Not tested.
Activity	Not tested.
Stability	Samples are stable for up to twelve months from date of receipt at -70℃
Protein Construction	DNA encoding 1-128 aa (O60783) were fused with 6His tag.

Storage & Handling

Reconstitution	Reconstitute at 0.25 μg/μl in sterile water for short-term storage. Reconstitution with 50% glycerol solution is recommended for longer term storage (see Stability and Storage for more details). If a different concentration is needed for your purposes please adjust the reconstitution volume as required (please note: the ion concentration of the final solution will vary according to the volume used). Note: Centrifuge vial before opening. When reconstituting, gently pipet and wash down the sides of the vial to ensure full recovery of the protein into solution.
Storage	Store it under sterile conditions at -20℃ to -80℃. It is recommended that the protein be aliquoted for optimal storage. Avoid repeated freeze-thaw cycles.
Shipping	In general, recombinant proteins are provided as lyophilized powder which are shipped at ambient temperature. Bulk packages of recombinant proteins are provided as frozen liquid. They are shipped out with blue ice unless customers require otherwise.

Description

Description	This product is a recombinant fragment of the Small ribosomal subunit protein uS14m (28S ribosomal protein S14, mitochondrial), also known as MRP-S14 or S14mt, derived from Homo sapiens. The fragment, spanning residues 1-128, was computationally designed for stability and solubility, making it ideal for structural and biochemical studies in mitochondrial ribosome research. The full-length Small ribosomal subunit protein uS14m is encoded by the MRPS14 gene and is localized to the mitochondrion, as supported by experimental evidence. As a component of the mitochondrial ribosome, this protein plays a critical role in mitochondrial protein synthesis, which is essential for cellular energy production and overall mitochondrial function. The provided fragment represents a key structural unit, facilitating investigations into ribosomal assembly and function within mitochondrial processes.